

Design Response

Bridgewater Retail Park,
Hayes



17th February 2023



Document Prepared for:



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01. EXECUTIVE SUMMARY

01.1 EXECUTIVE SUMMARY

Following proactive engagement with Hillingdon Council, the proposed Option 2A masterplan (shown) has developed significantly, striving to align with the corridor enhancement strategy, urban greening ambitions and placemaking, whilst ensuring compulsory institutional standards are met.

- 1 **No loss of HGV parking**
A small area of the yard lost to accomodate additional landscaping, while maintaining HGV parking numbers.
- 2 **Urban greening**
The total green area percentage has increased from 4% to 19% through the implementation of additional landscaping, green wall and green roofs.
- 3 **Retaining existing green areas** rather than utilising it for additional car parking spaces to meet urban greening targets.
- 4 **Green roofs** included over the offices to increase green space provision throughout the site.
- 5 **Flood mitigation** through urban greening and reduction in impermeable surfaces.
- 6 **Car parking** offers ample space and utilises permeable paving to improve SuDS provision.
- 7 **Worker break areas** provided through green roof access above the main office, and landscaping maintained adjacent to Uxbridge Road for external seating opportunities.
- 8 **Active frontage** that engages with Uxbridge Road.



01.1 EXECUTIVE SUMMARY

1 Active engagement

Significant amendments have been made to the building footprint resulting in a layout that actively engages with Uxbridge Road.

2 Architectural form

A revised architectural form, reminiscent of a north light structure, has been employed to articulate the elevation, break down the longitudinal mass and add depth to the façade.

3 'North Light' style parapet solution

The long elevations have been activated with the introduction of a 'North Light' style parapet solution. This design divides the building mass while offering a legible roofscape for both distant and near views.

4 Rooflights

The rooflight specification is suitable for a building of this orientation and scale. The roof light provision is in accordance with tried and tested industry requirements / expectations.

5 The architecture is split into two complimentary styles.

The office element is expressive and modern, referencing architectural styles of adjacent landmark buildings, while the warehouse offers a familiar, historic form.



02. MASTERPLAN EVOLUTION

MASTERPLAN

The original option provides a single unit set back to the South-West boundary of the site, providing landscaping & car parking fronting Uxbridge Road, with office frontage set back for privacy to the neighbouring residential.

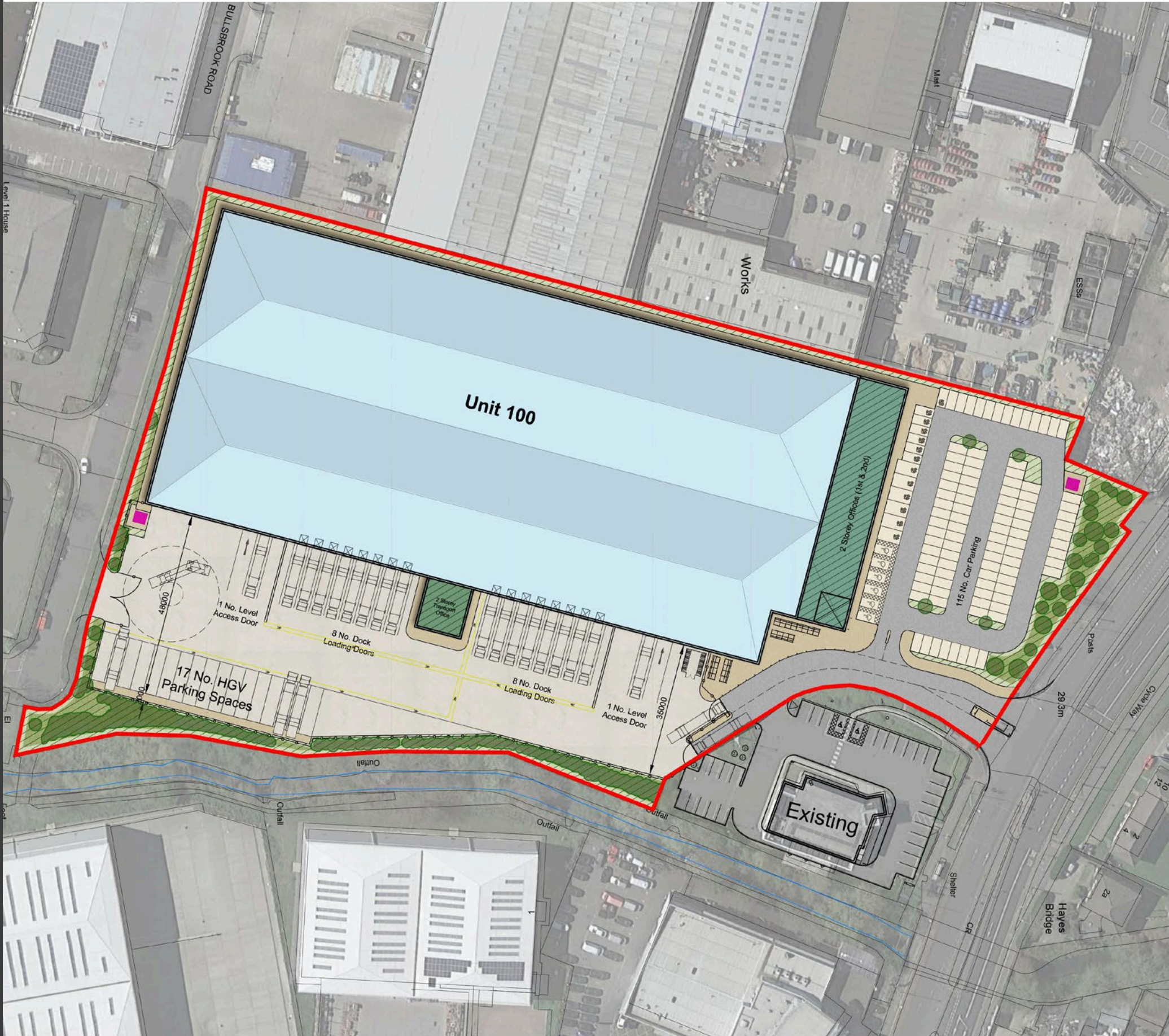
Development consists of:

Warehouse Area	-	151,415 sq ft (14,067 sq m)
2 Storey Office	-	19,181 sq ft (1,782 sq m)
Transport Office	-	3,433 sq ft (319 sq m)
Total Area	-	174,030 sq ft (16,168 sq m)

Car Parking Spaces	-	115 spaces
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Green Area Total (% of site area inc. green roof and landscaping)

Existing	-	1,150 sq m	4%
HC Proposal	-	6,150 sq m	21%
Option 2 (shown)	-	3,583 sq m	12%



MASTERPLAN

Following the feedback from Hillingdon Council, 3 options were prepared to place the office facility closer to Uxbridge Road. Option 2 (shown) was most preferred.

This option provides a single unit set back to the South-West boundary of the site, providing landscaping, car parking and office frontage to Uxbridge Road with a bridge link connecting the office and warehouse.

Total green area percentage has been addressed through additional landscaping and a green roof solution.

Development consists of:

Warehouse Area	-	151,401 sq ft (14,065 sq m)
2 Storey Office	-	10,095 sq ft (938 sq m)
3 Storey Office	-	13,600 sq ft (1,263 sq m)
Transport Office	-	3,433 sq ft (319 sq m)
Total Area	-	178,529 sq ft (16,585 sq m)

Car Parking Spaces	-	98 spaces
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Green Area Total (% of site area inc. green roof and landscaping)

Existing	-	1,150 sq m	4%
HC Proposal	-	6,150 sq m	21%
Option 2 (shown)	-	3,500 sq m	12%



HC MASTERPLAN PROPOSAL

The Hillingdon Council Urban Design Assessment proposed a masterplan option which assesses an alternative layout for the site. This design response places great importance on active frontages, car access from the south and additional landscaping to increase the urban greening factor.

Development consists of:

Car Parking Spaces - **90 spaces**

Green Area Total (% of site area inc. green roof and landscaping)

Existing - **1,150 sq m** **4%**

Our Proposal - **3,500 sq m** **12%**

HC Proposal - **6,150 sq m** **21%**

RESPONSE TO DESIGN CHANGES

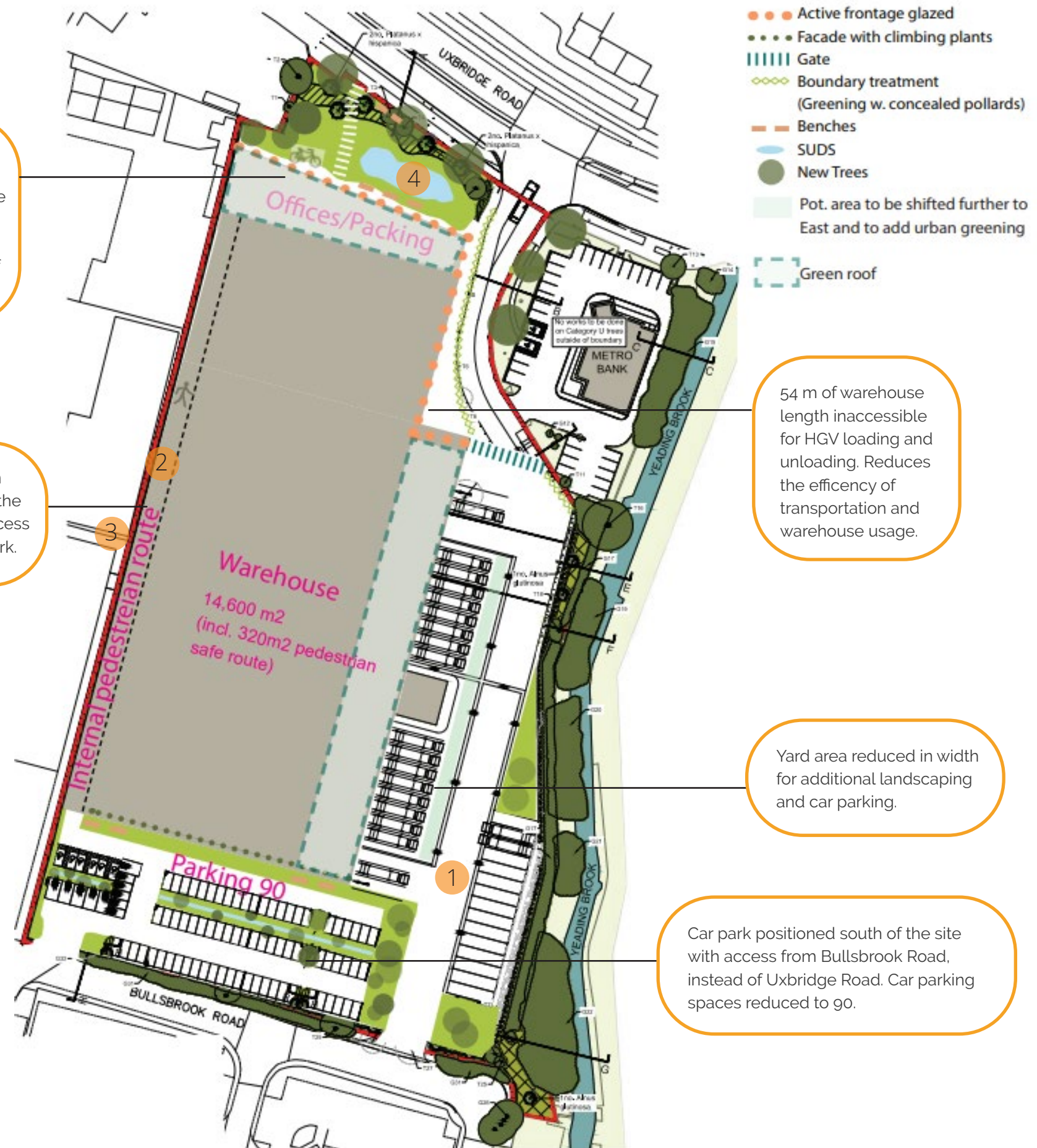
- 1 **Loss of yard**
The yard was already tight so to effectively lose c. 1/3 of the area is not practical an institutional / tenant perspective.
- 2 The **internal pedestrian link** via the warehouse is a health and safety concern and would sterilise significant floor space for any tenant.
- 3 **External footpath** along the western boundary must be retained for emergency escape etc. This will result in further loss of area.
- 4 The location of the **SuDS / pond** as indicated by the LPA doesn't really work. The point of discharge for SW is to the south east (into the brook). This would effectively result in pumping up to the pond to then discharge via gravity to the south east. Option 2 proposal utilises permeable paving to the car park areas which is a form of SUDs.



Design changes

Length of the warehouse increased with offices placed closer to Uxbridge Road for additional road presence. This provides only a 535 m2 increase of warehouse area.

A large internal pedestrian route spans the length of the warehouse (189 m2) to access the offices from the car park.



MASTERPLAN

Based on the Hillingdon Council *Urban Design Assessment masterplan proposal, a functional option was prepared.*

This option provides a single unit set forward to the North-West boundary of the site fronting Uxbridge Road. Car parking is set further back with access from Bullsbrook Road.

To address ease of access, offices have been positioned away from Uxbridge Road and next to the car park, rather than providing an internal pedestrian route spanning the length of the warehouse.

As suggested, additional landscaping and a green roof solution has been implemented.

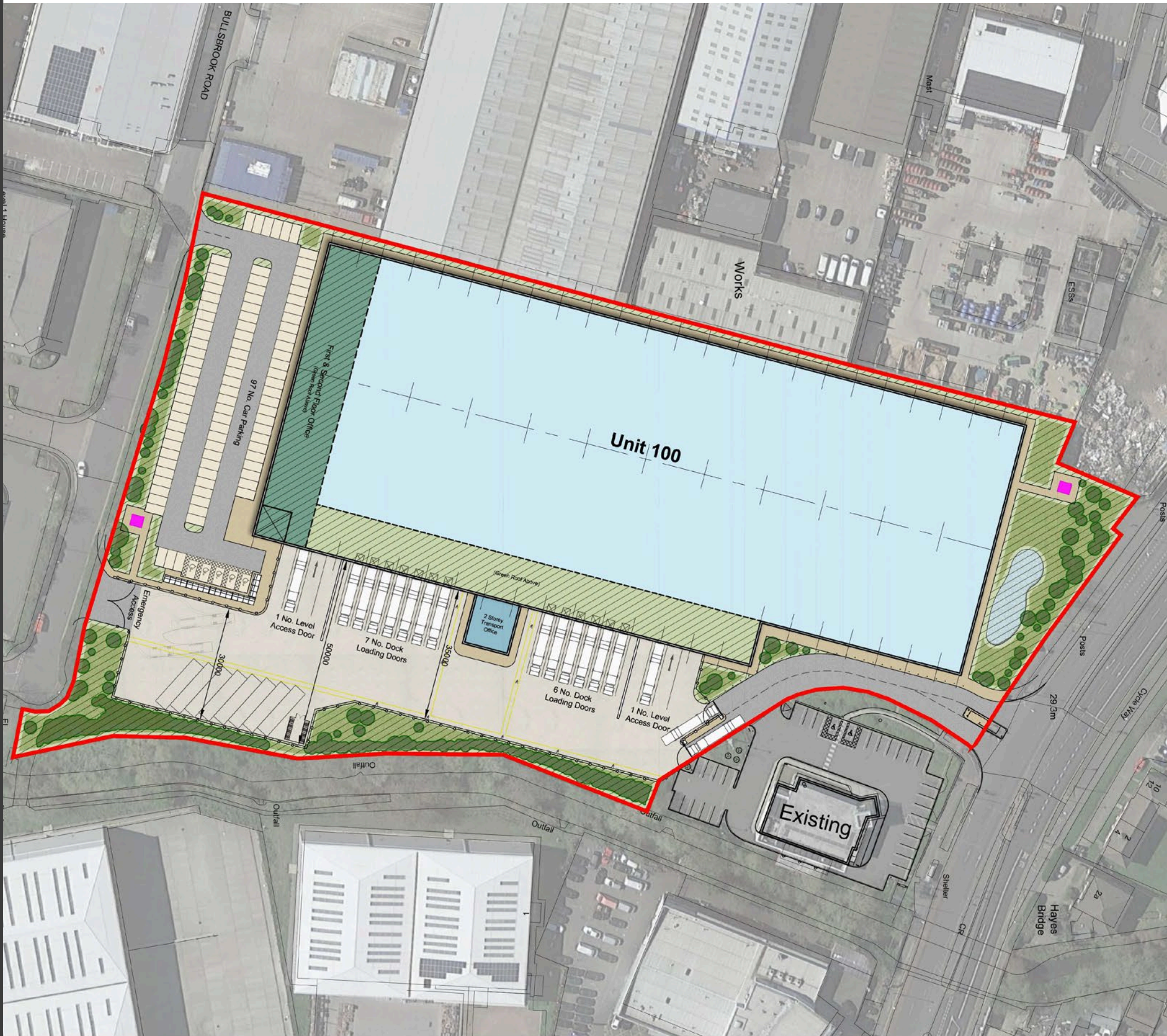
Development consists of:

Warehouse Area	-	151,391 sq ft (14,065 sq m)
2 Storey Office	-	23,695 sq ft (2,201 sq m)
Transport Office	-	3,433 sq ft (319 sq m)
Total Area	-	178,519 sq ft (16,585 sq m)

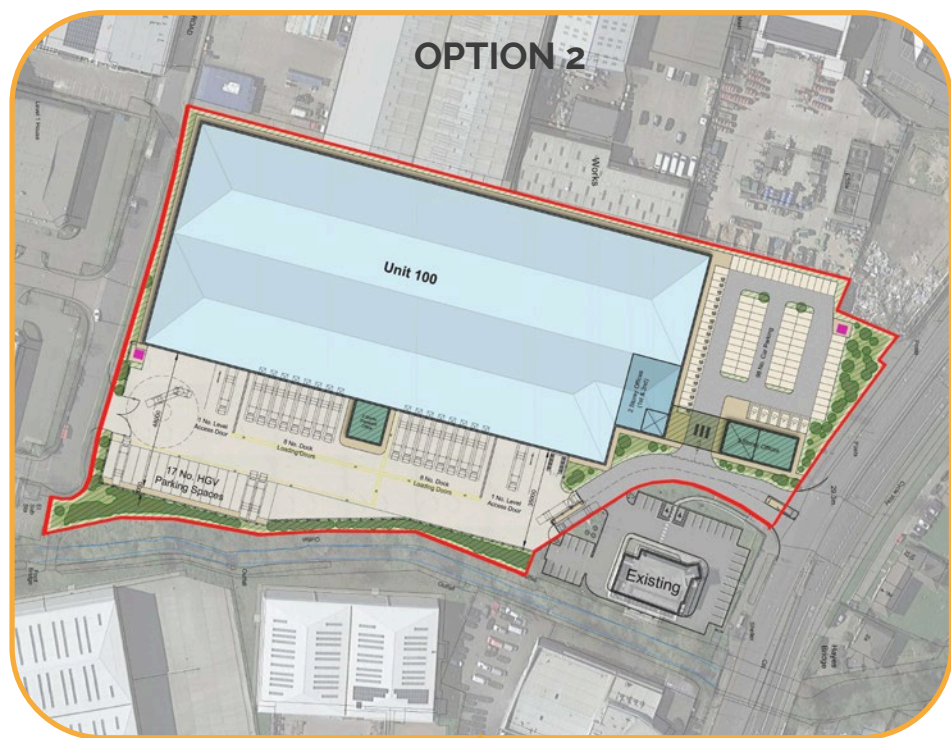
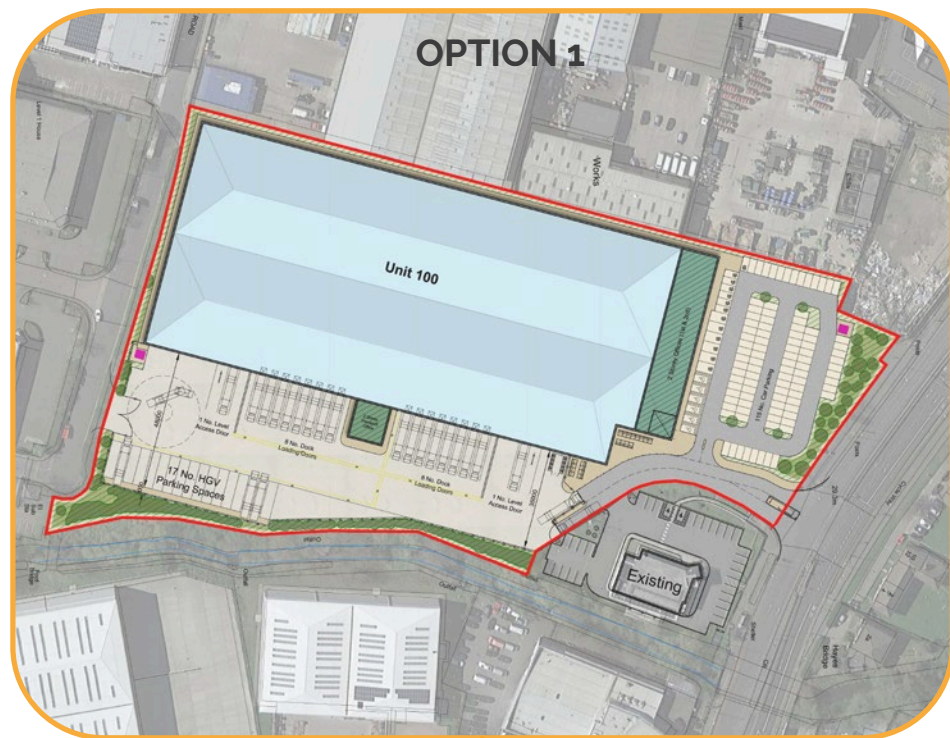
Car Parking Spaces	-	97 spaces
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Green Area Total (% of site area inc. green roof and landscaping)

Existing	-	1,150 sq m	4%
HC Proposal	-	6,150 sq m	21%
Option 2 (shown)	-	6,629 sq m	23%



02.5 OPTION LAYOUT ANALYSIS



Warehouse Area	-	151,415 sq ft	(14,067 sq m)
Office	-	19,181 sq ft	(1,782 sq m)
Transport Office	-	3,433 sq ft	(319 sq m)
Total Area	-	174,030 sq ft	(16,168 sq m)

Car Parking	-	115	●
Dock Loading Doors	-	16	●
Level Access Doors	-	2	●
Concrete Yard Area	-	6,549 sq m	●
Fire Access %	-	66.7%	●
Yard Frontage	-	150.3m	●
HGV Parking	-	17	●
Office Frontage to Uxbridge Road	-	Yes	●

Green Roof	-	951 sq m	
Green Area	-	2,631 sq m	
Green Area Total (%)	-	3,583 sq m	(12%) ●

Warehouse Area	-	151,401 sq ft	(14,065 sq m)
Office	-	23,695 sq ft	(2,201 sq m)
Transport Office	-	3,433 sq ft	(319 sq m)
Total Area	-	178,529 sq ft	(16,585 sq m)

Car Parking	-	98	●
Dock Loading Doors	-	16	●
Level Access Doors	-	2	●
Concrete Yard Area	-	6,549 sq m	●
Fire Access %	-	71.5%	●
Yard Frontage	-	150.3m	●
HGV parking	-	17	●
Office Frontage to Uxbridge Road	-	Yes	●

Green Roof	-	640 sq m	
Green Area	-	2,860 sq m	
Green Area Total (%)	-	3,500 sq m	(12%) ●

Warehouse Area	-	151,391 sq ft	(14,065 sq m)
Office	-	23,695 sq ft	(2,201 sq m)
Transport Office	-	3,433 sq ft	(319 sq m)
Total Area	-	178,519 sq ft	(16,585 sq m)

Car Parking	-	97	●
Dock Loading Doors	-	13	●
Level Access Doors	-	2	●
Concrete Yard Area	-	5,280 sq m	●
Fire Access %	-	54.4%	●
Yard Frontage	-	113.8m	●
HGV parking	-	8	●
Office Frontage to Uxbridge Road	-	No	●

Green Roof	-	2,494 sq m	
Green Area	-	4,135 sq m	
Green Area Total (%)	-	6,629 sq m	(23%) ●

MASTERPLAN

This option provides a single unit set back to the South-West boundary of the site, providing landscaping, car parking and office frontage to Uxbridge Road with a bridge link connecting the office and warehouse.

Option 2A further develops Option 2 by implementing additional landscaping and green roof elements to increase the total green area percentage. The car parking arrangement has been amended to suit.

Development consists of:

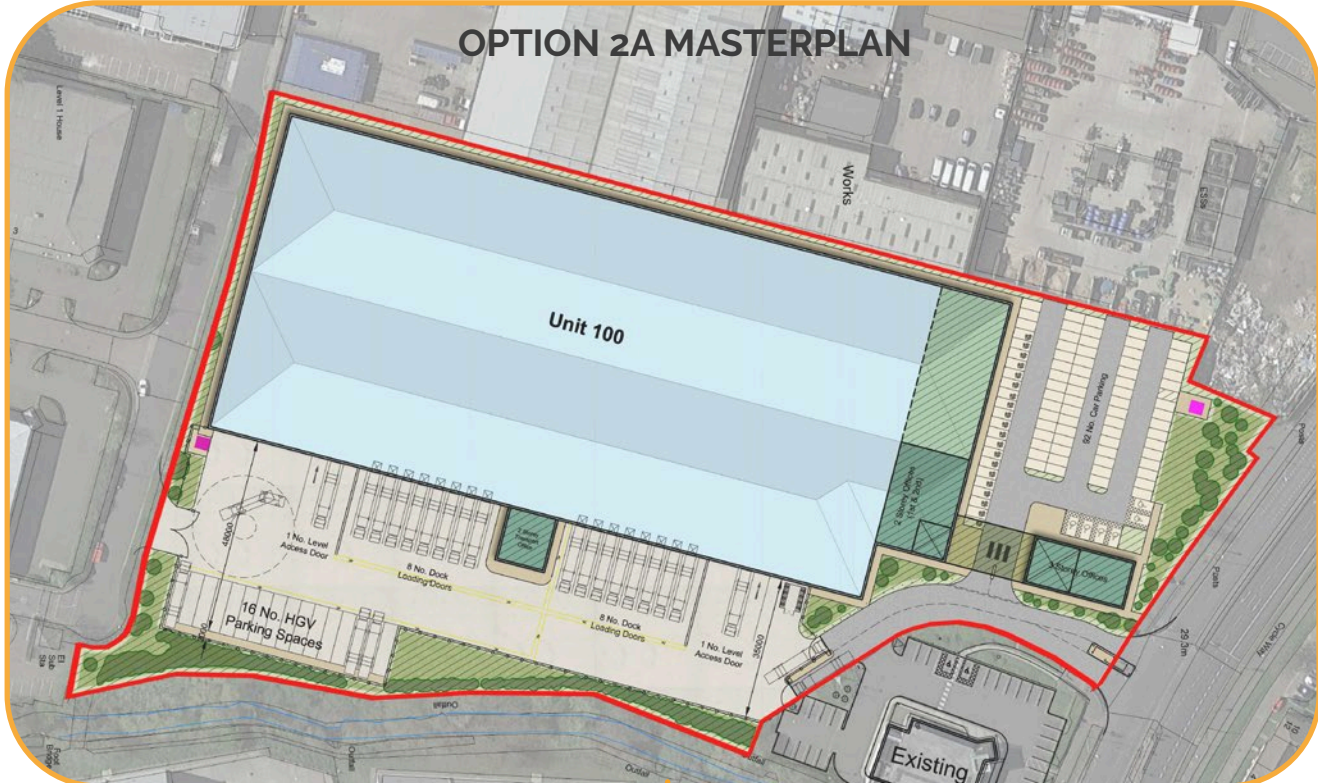
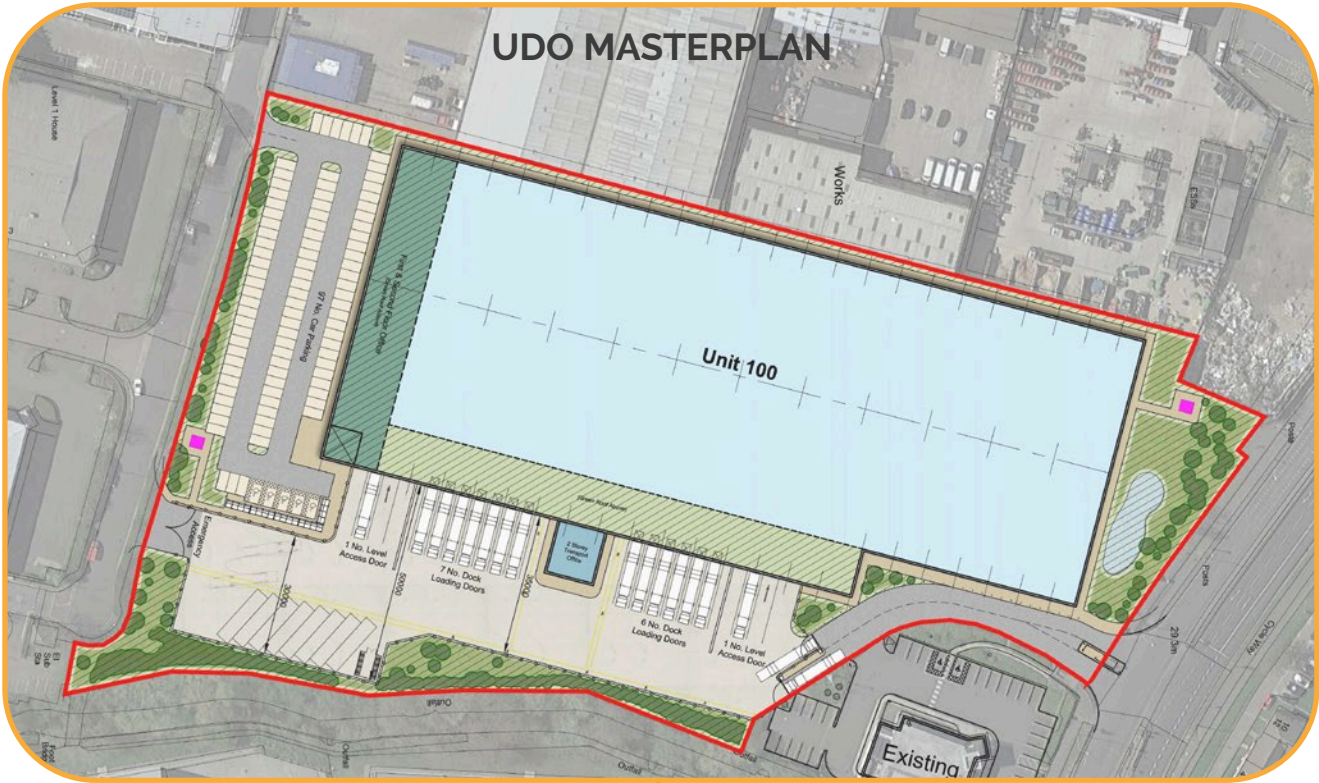
Warehouse Area	-	151,401 sq ft (14,065 sq m)
2 Storey Office	-	10,095 sq ft (938 sq m)
3 Storey Office	-	13,600 sq ft (1,263 sq m)
Transport Office	-	3,433 sq ft (319 sq m)
Total Area	-	178,529 sq ft (16,585 sq m)

Car Parking Spaces	-	92 spaces
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Green Area Total (% of site area inc. green roof and landscaping)

Existing	-	1,150 sq m	4%
HC Proposal	-	6,150 sq m	21%
Option 2 (shown)	-	5,180 sq m	18%
Option 2 (incl. green wall)	-	5,371 sq m	19%





Warehouse Area	-	151,391 sq ft	(14,065 sq m)	
Office	-	23,695 sq ft	(2,201 sq m)	
Transport Office	-	3,433 sq ft	(319 sq m)	
Total Area	-	178,519 sq ft	(16,585 sq m)	
Car Parking	-	97		●
Dock Loading Doors	-	16		●
Level Access Doors	-	2		●
Concrete Yard Area	-	5,280 sq m		●
Fire Access %	-	54.4%		●
Yard Frontage	-	113.8m		●
HGV parking	-	8		●
Office Frontage to Uxbridge Road	-	No		●
Green Roof	-	2,494 sq m		
Green Area	-	4,135 sq m		
Green Area Total (%)	-	6,629 sq m	(23%)	●

Warehouse Area	-	151,401 sq ft	(14,065 sq m)	
Office	-	23,695 sq ft	(2,201 sq m)	
Transport Office	-	3,433 sq ft	(319 sq m)	
Total Area	-	178,529 sq ft	(16,585 sq m)	
Car Parking	-	92		●
Dock Loading Doors	-	16		●
Level Access Doors	-	2		●
Concrete Yard Area	-	6,187 sq m		●
Fire Access %	-	71.5%		●
Yard Frontage	-	150.3m		●
HGV parking	-	16		●
Office Frontage to Uxbridge Road	-	Yes		●
Green Roof	-	1,755 sq m		
Green Area	-	3,425 sq m		
Green Area Total (%)	-	5,371 sq m	(19%)	●

03. ELEVATIONAL TREATMENT

BATZ & BURGEL

Location: Sebastian - Mayr - Str.
8 | 86316 Friedberg | Germany

Project Year: 2013

Architect: Felix Weinold



Batz + Burgel Building

FORM

The Batz + Burgel building uses recessed windows and projecting cladding create depth to the form, reducing the flatness of the elevation. The recessing and projecting facade elements reflect the elevational treatment of the neighbouring Apart Hotel.



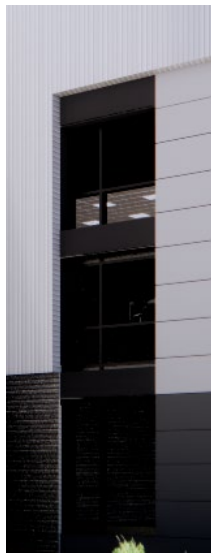
*Batz + Burgel
Window-Frame
Ratio*



*Apart Hotel
(planning
permission)*



*Option 2A
Window-Frame
Ratio*



*Option 2A
cladding colour
contrast*

COLOUR AND CLADDING

The Batz + Burgel building breaks down the volume using colour variation and architectural treatment to distinguish each sector of the building.

The contrasting white, grey and black cladding panels differentiates each area within the building envelope. This strategy creates a hierarchy of mass and distinguishable legible entrances around the site.

Similarly, our design adopts this approach to create a distinction between the office and warehouse.

Breakdown of mass into visually comprehensible sectors:

- Offices
- Warehouse
- Warehouse (human-scale level)
- Bridge



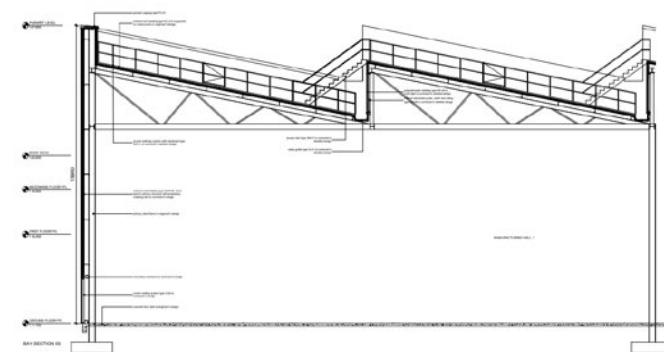
Option 2A Facade Treatment

JAGUAR LAND ROVER MANUFACTURING CENTRE

Location: i54 Business Park | Innovation Drive | Wolverhampton | WV9 5GB

Architects: Arup Associates

Project Year: 2018



JLR Bay Section Detail

ROOFSCAPE

(SAW-TOOTH ROOF PROFILE)

The proposed roof profile supports the natural day lighting strategy in the JLR Building through the articulation of a north light solution.

Historically, many industrial units have implemented a north light solution to reduce the energy demand for the building. Through the analysis and research of the JLR building, a true north-light solution has been explored. Although this strategy is viable for some warehouses, a saw-tooth parapet profile with a standard pitched roof would work just as effectively.

03.1

DESIGN PRECEDENT

MASSING

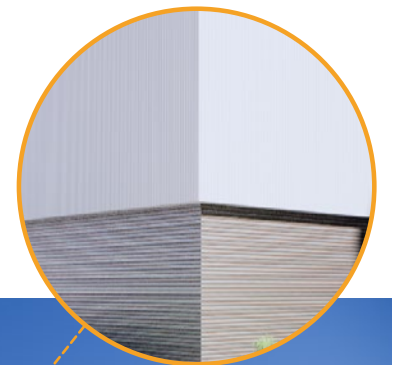
The JLR Manufacturing Centre breaks down the mass of the building by manufacturing spaces into visually comprehensible elements. The darker cladding separating the fins expresses each module as a distinct element. This strategy creates a sense of order, scale and presence around and within the site.

Similarly, the aim for the Bridgewater Retail Park scheme is to break down the warehouse form into comprehensible and legible elements through its architectural treatment. The vertical hierarchy that is expressed in the façade treatment, particularly through the introduction of low level darker trapezoidal cladding panels, articulates the building to a human-scale at close quarters.



Option 2A Long Elevation

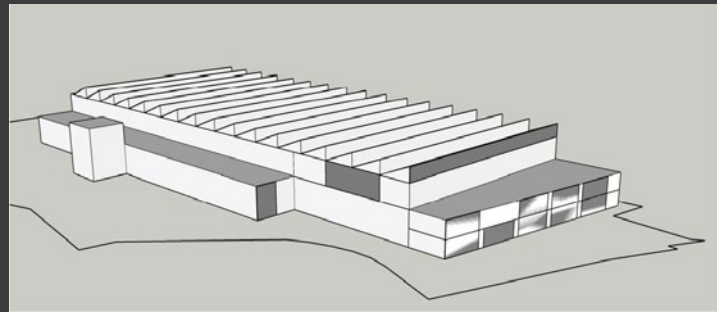
The contrast between the light vertical and dark horizontal trapezoidal cladding punctuates the long elevation. Additionally, each fin extends out of the warehouse volume by 500mm to create depth to the form and provide further presence within the site.



Option 2A Facade Treatment

HC PROPOSED ROOFSCAPE

A saw-tooth roofscape was proposed in the Hillingdon Council Urban Design Assessment. Roof lights are orientated towards north for the filtration of natural light through the warehouse.



HC Roofscape Proposal

This saw-tooth roof profile breaks down the long elevation of the building into visually comprehensible elements. Although this design supports the natural day lighting strategy through north lights, it is rather more expensive.

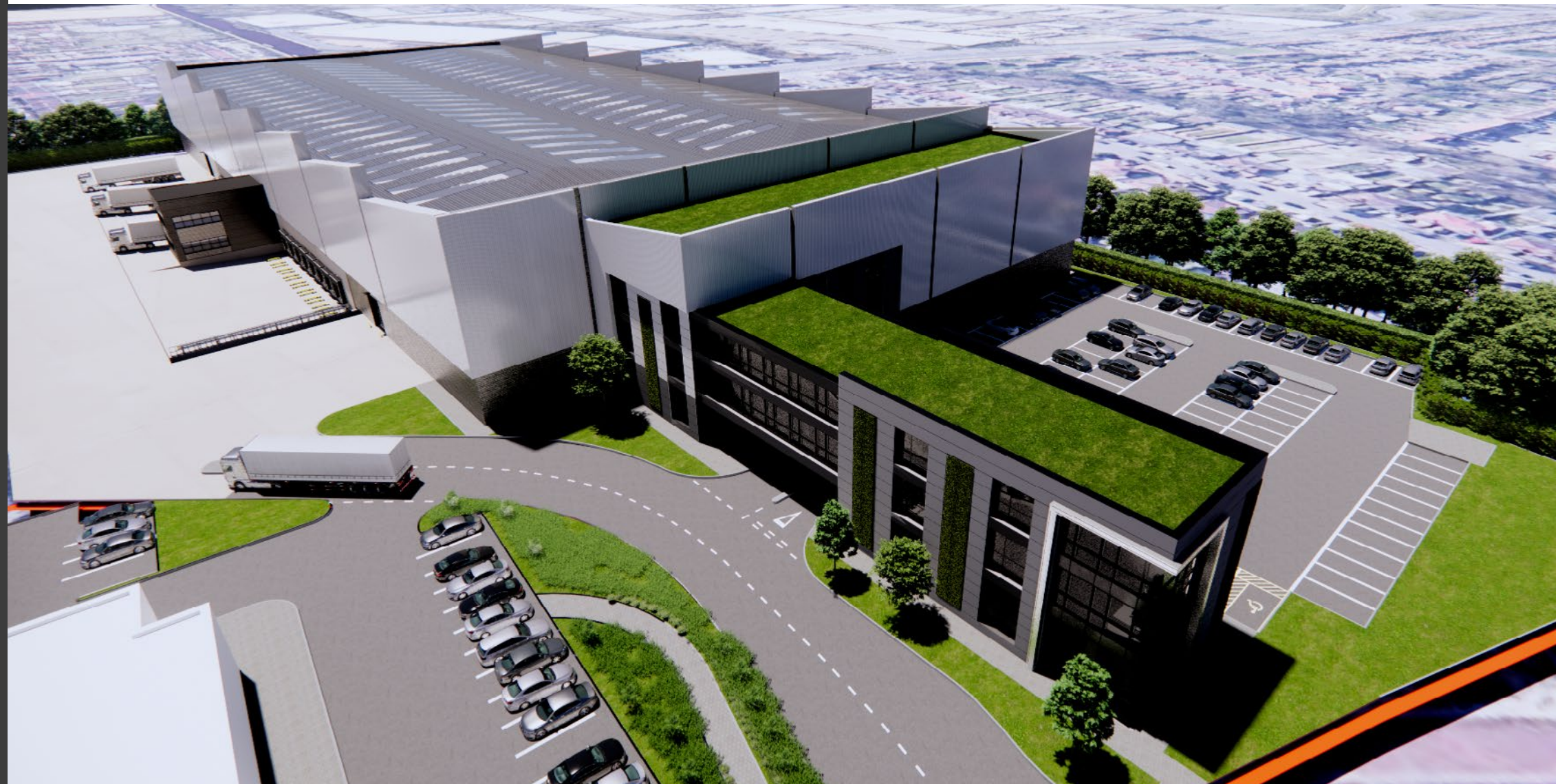
Access stairs at each roof gradient would be required for roof access and maintenance. Although explored in detail, this true north light solution is not commercially viable.

PROPOSED ROOF SOLUTION

A revised architectural form (Option 2A shown) reminiscent of the HC north light structure has been employed to articulate the elevation, break down the longitudinal mass and add depth to the façade.

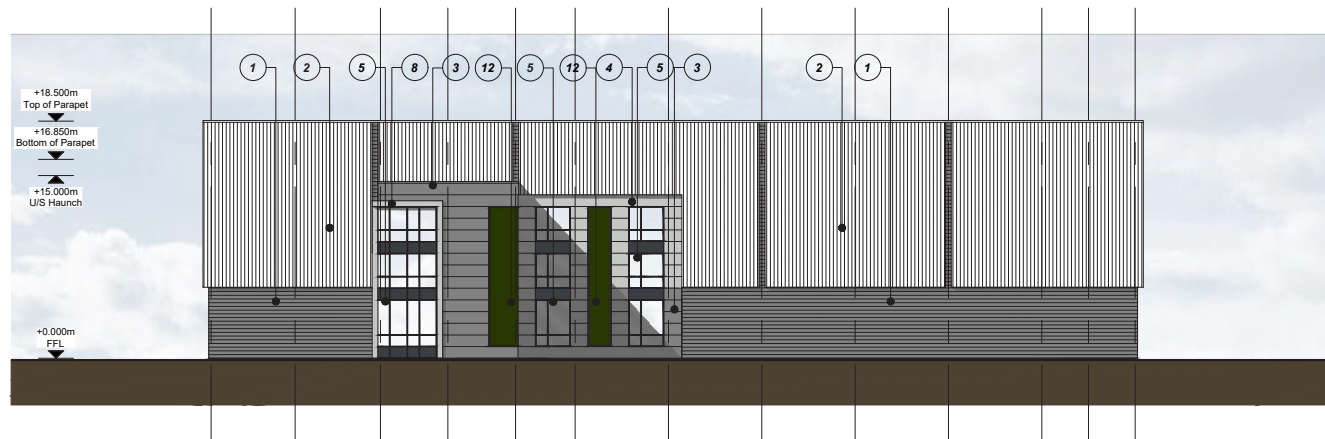
The architecture is split into two complimentary styles. The warehouse offers a familiar historic form while the saw-tooth parapet design presents a modern, yet, distinguishable presence within the industrial sector of the site.

At a human-scale, this design provides the same aesthetic as the HC proposal, while being a much cost-effective solution.

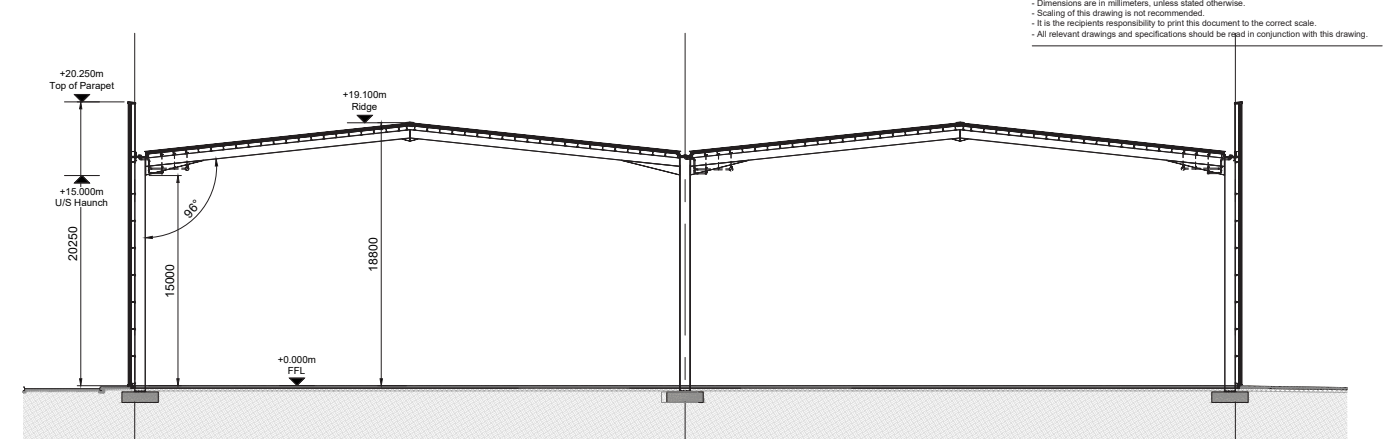
OPTION 2A PROPOSED AERIAL VIEW



03.4 PROPOSED ELEVATIONS

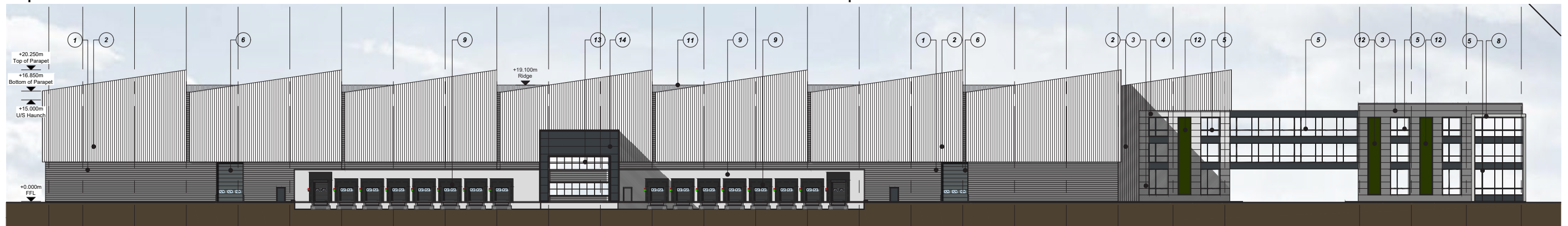


Proposed North Elevation Scale 1:300

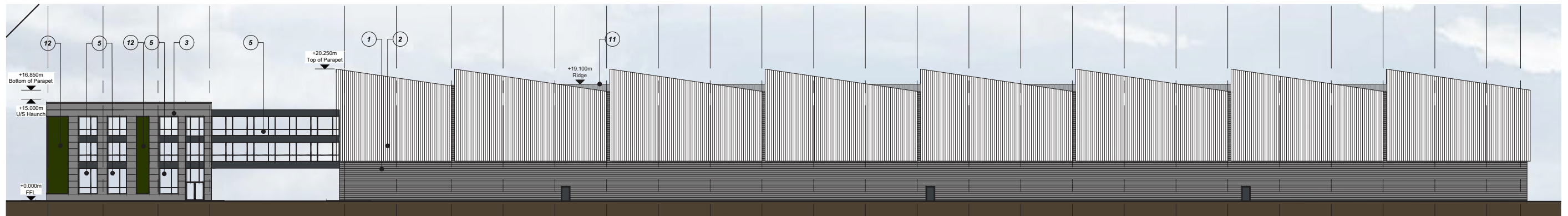


Proposed Section Scale 1:300

Dimensions are in millimeters, unless stated otherwise.
Scaling of this drawing is not recommended.
It is the recipient's responsibility to print this document to the correct scale.
All relevant drawings and specifications should be read in conjunction with this drawing.



Proposed East Elevation Scale 1:300



Proposed West Elevation Scale 1:300



Proposed South Elevation Scale 1:300

Key

- | | | | |
|---|---|----|---|
| 1 | Horizontally laid trapezoidal built up wall cladding
Colour: Pure Grey (RAL 000 55 00) | 8 | Feature Entrance
Colour: Oyster (RAL 7035) |
| 2 | Vertically laid trapezoidal built up wall cladding
Colour: White (RAL 9003) | 9 | Pre-cast insulated dock pro-wall system |
| 3 | Horizontally laid colour coated cladding system with microrib finish
Colour: Pure Grey (RAL 000 55 00) | 10 | Overhead sectional doors with dock leveller
Colour: Anthracite (RAL 7016) |
| 4 | Horizontally laid colour coated cladding system with microrib finish
Colour: Hamlet (RAL 9002) | 11 | Built up roof cladding
Colour: Goosewing Grey (RAL 7036) |
| 5 | Aluminium curtain walling system
Glazing: Grey tinted
Frame Colour: Anthracite (RAL 7016) | 12 | Green Wall |
| 6 | Overhead sectional doors with level access
Colour: Anthracite (RAL 7016) | 13 | Aluminium window/door system
Glazing: Grey tinted
Frame Colour: Anthracite (RAL 7016) |
| 7 | Security door & frame.
Colour: to match adjacent cladding | 14 | Horizontally laid colour coated cladding system with microrib finish
Colour: Anthracite (RAL 7016) |

rev amendments by ckd date
Bridgewater Retail Park, Hayes

Proposed Elevations


OXENWOOD
REAL ESTATE
GRAFTONGATE


Newark Beacon, Cafferata Way, Newark, Nottinghamshire NG24 2TN
+44 (0)1636 653027 info@umcarchitects.com

03.5 ELEVATION COMPARISON

OPTION 1



- **Active frontage** - A welcoming frontage, however has less road presence as the main building mass is set further back from Uxbridge Road. Curtain wall elements distinguish the building entrance.
- **Form** - Offices are set within the warehouse volume and are extruded, forming a distinction between warehouse and office. This design implements a standard pitched roofscape for the warehouse and flat roof for the offices.
- **Colour and cladding** - Similar warehouse and office colour, however cladding variation forms a distinction. The feature post design reflects the window frame shape of the neighbouring Apart Hotel (planning permission) forming a relationship to its surrounding context.
- **Windows** - Standard rectangular windows implemented in the office, with curtain walling at the entrance to form and active frontage. No recessed or extended elements result in flatness to the facade.
- **Urban greening** - Additional landscaping fronting Uxbridge Road contributes to the urban greening strategy

OPTION 2A



- **Active frontage** - An inviting frontage with greater road presence. Curtain wall elements front Uxbridge Road revealing the internal office activity.
- **Form** - Offices form a bridged extension from the warehouse volume. The warehouse is distinguished by its saw-tooth parapet design whereas the offices implement a flat roof design.
- **Colour and cladding** - There is a clear distinction between office, bridge and warehouse through contrasting colours and cladding variation.
- **Windows** - Square windows and window:frame ratio explored to form a relationship with the neighbouring Apart Hotel (planning permission). Recessed windows create depth within the elevation.
- **Urban greening** - Additional landscaping and elements of green wall across the elevation contribute to the urban greening strategy for the Uxbridge Road corridor.

04. UXBRIDGE ROAD PRESENCE

SITE



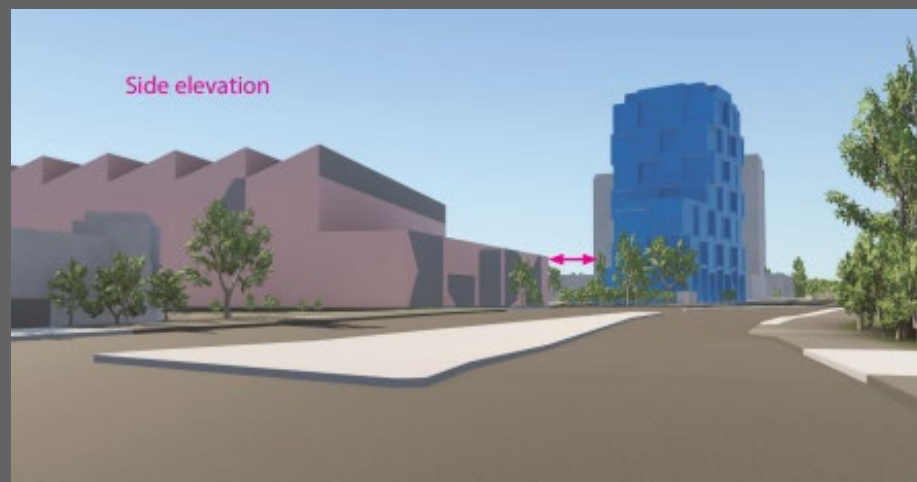
The existing building currently occupying the site cannot be seen clearly and lacks an active frontage.

EXISTING



The existing building lacks road presence from the side elevation.

HC PROPOSAL



Mass is set forward toward Uxbridge Road, for greater road presence.

OPTION 2A PROPOSAL



Aerial View with viewpoints

ROAD PRESENCE

The side elevation provides road presence to Uxbridge Road, with comparable prominence to the HC Proposal (*dashed outline*). The projecting bridged extension of offices from the warehouse mass design, allows the scheme to stand out in within its industrial sector, and between neighbouring large-scale hotels along Uxbridge Road.

ACTIVE FRONTAGE

The extension of the offices implement green wall elements and curtain walling to reveal the inner activity within the offices; offering a welcoming and inviting frontage to Uxbridge Road.

SITE



The site has become hidden within its dominating surrounding context.

EXISTING



The existing building is concealed behind Apart Hotel (planning application).

HC PROPOSAL



Slightly greater road presence, however still continues to lack presence behind the hotel.

OPTION 2A PROPOSAL



ROAD PRESENCE

Road presence is significantly greater with Option 2A than the HC proposal (*dashed line*) facing east on Uxbridge Road. Green areas of refuge fronting Uxbridge Road, form a sense of breathability within the streetscape, while also sustaining the scheme's road presence.

Context has been carefully considered; the building mass steps down toward the offices to become less overbearing and more mindful of the residential housing opposite.

ACTIVE FRONTAGE

The landscaped areas fronting Uxbridge Road provide outdoor space for employees and external seating for the public.



Aerial View with viewpoints

SITE



Frontage view of the site from Longford Gardens.

EXISTING



Existing building is recessed behind the Apart Hotel (planning permission).

HC PROPOSAL



HC Proposal has a larger mass set closer to Uxbridge Road, yet slightly behind Apart Hotel (planning permission).

OPTION 2A PROPOSAL



ROAD PRESENCE

Although the warehouse volume is set further back, the offices extend very close to the Uxbridge Road boundary, in line with the neighbouring Apart Hotel. Again, this offers a prominent design while not being an overbearing industrial development for the residential housing opposite.

ACTIVE FRONTAGE

Visibility of car parking and the development scope for external seating and worker break areas form an interactive environment.

From the visual above, it is evident that space for car parking and green areas fronting Uxbridge Road will provide the necessary visual break between the large-scale proposed and existing neighbouring developments.



Aerial View with viewpoints

05. URBAN DESIGN OFFICER RESPONSE

	DESIGN OBJECTIONS	RESPONSE
1	Architectural setting (building disengaged with major Uxbridge Rd corridor)	Significant amendments have been made to the building footprint, resulting in a layout that actively engages with Uxbridge Road.
2	Architectural appearance (Combination of excessive side lines (170m) and tall height)	A revised architectural form, reminiscent of a north light structure, has been employed to articulate the elevation, break down the longitudinal mass and add depth to the façade.
3	Tall building / design concern (Given its inevitable greater visibility, the impact of a tall building on the local townscape and the wider skyline should be meaning full and well justified. The current proposal comprises an unarticulated massing and appears as an oversized box, no roofscape)	The long elevations have been activated with the introduction of a 'North Light' style parapet solution. This design divides the building mass whilst offering a legible roofscape for both distant and near views.
4	Architectural appearance more akeen to motorway service station rather than to commercial centre	The architecture is split into two complimentary styles. The office element is expressive and modern, referencing architectural styles of adjacent landmark buildings, whilst the warehouse offers a familiar historic form.
5	Lack of flood mitigation	A significant increase urban greening and reduction in impermeable surfaces adds to flood mitigation measures.
6	Overheating through roof lights, these are not orientated towards north, non-openable and have no external blinds (solar shading)	The rooflight specification is suitable for a building of this orientation and scale. The roof light provision is in accordance with tried and tested industry requirements / expectations.
7	Urban greening factor not achieved	The initial proposal offered 4% site green area (including green roof and landscaping). Through active engagement with Hillingdon Council and design development, this figure has increased to 19%.
8	No outdoor worker's break provision	The revised layout offers access to the green roof area above the main office element. Furthermore, as landscaping is maintained adjacent to Uxbridge road, additional external break areas are offered.

06. SUMMARY

The content of this design response document demonstrates the evolution of the design in both plan and elevation. Following proactive engagement with Hillingdon Council, the design has developed significantly striving to align with the corridor enhancement strategy, urban greening ambitions and placemaking while ensuring compulsory institutional standards are met.

The proposed masterplan (Option 2A) and corresponding elevational treatment offers a cohesive design, responsive to its setting, while enhancing the character of Uxbridge Road. The office element reaches out and meets Uxbridge Road expressing the high tech nature of the building, while the larger warehouse element is nestled to the rear of the site with a roof scape that manifests and enforces the industrial character of the use and setting.





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